

REMARKS

Applicants thank the Examiner for the telephone interview of September 17, 2008. We reviewed the present invention and a proposed amendment. Applicants agreed to submit the amendment and do so with this response.

Amendments to the claims

Applicants have amended claim 1 with the limitation “...a storage agent comprising a metadata management module...” The amendment is well supported by the specification. See fig. 2, ref. 212, 222. Claim 1 is further amended with the limitation “...the metadata comprising a file data characteristic, a device characteristic, a media characteristic, a positioning indicator, and an append position indicator...” The amendment is fully supported by the specification. See page 4-5, ¶ 13.

Applicants have further amended claim 1 with the limitation “...file data corresponding to a client and stored on a specified volume ...” The amendment is well supported by the specification. See page 12, ¶ 45.

Claim 1 is further amended with the limitations “...the storage agent receiving a write request from the client; the storage agent further comprising a volume management module that sends a volume access request for the specified volume to the storage server, receives an available volume notification for the specified volume from the storage server, and sends a mount request to a storage device to mount the specified volume...” The amendment is fully supported by the specification. See page 12, ¶ 43; page 15, ¶ 54; page 16, ¶ 57; fig. 2, ref. 212, 214; fig. 4, ref. 404, 406; fig. 5, ref. 504, 506, 508.

Applicants have further amended claim 1 with the limitations “...write to access the file data on the specified volume using ~~with~~ the metadata...” The amendment is well supported by the specification. See page 12, ¶ 45.

Claims 10, 15, 19, 25, and 29 are similarly amended. Claims 2-5, 13, 16, 20, and 26 are amended to conform to amended predecessor claims. Claims 6, 11, 22, 24, and 28 are canceled.

Claim Rejections under 35 U.S.C. § 103

Claims 1, 6-8, 10, 12, 15, 19, 22, 24, 25, 28, and 29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US patent publication 2007/0094354 by Soltis (hereinafter Soltis) in view of US patent publication 2005/0138162 by Byrnes (hereinafter Byrnes) and in further view of US patent publication 2007/0180446 by Sirota et al. (hereinafter Sirota). Claims 2, 11, and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Soltis in view of Byrnes and Sirota, and further in view of US patent publication 2003/0065782 b Nishanov (hereinafter Nishanov). Claim 3 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Soltis in view of Byrnes, Sirota, and Nishanov, and further in view of US patent publication 2002/0188733 by Collins (hereinafter Collins). Claims 4 and 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Soltis in view of Byrnes, Sirota, and Nishanov, and further in view of US patent publication 2005/0123122 by Porter (hereinafter Porter). Claims 9, 17, 21, and 27 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Soltis in view of Byrnes and Sirota, and further in view of US patent 7,254, 636 to O’Toole (hereinafter O’Toole). Claims 13 and 23 stand rejected under 35 U.S.C. 103(a) as being

unpatentable over Soltis in view of Byrnes and Sirota, and further in view of Porter.

Claims 14 and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Soltis in view of Byrnes and Sirota, and further in view of US patent 6,952,737 by Coates (hereinafter Coates). Claims 20 and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Soltis in view of Byrnes, and further in view of Collins.

Independent claim 1 as amended includes the limitations:

“...a first network interface configured to allow the apparatus to communicate with a storage server;

a second network interface configured to allow the apparatus to communicate with a storage device on a storage area network;

a storage management client configured to communicate with the storage server and coordinate use of the storage device;

a storage agent comprising a metadata management module configured to minimize metadata processing on the apparatus by communicating metadata to the storage server to be exclusively stored in a centralized metadata database on the storage server, **the metadata comprising a file data characteristic, a device characteristic, a media characteristic, a positioning indicator, and an append position indicator**, associated with file data corresponding to a client, and stored on a specified volume;

the storage agent receiving a write request from the client;

the storage agent further comprising a volume management module that **sends a volume access request for the specified volume to**

the storage server, receives an available volume notification for the specified volume from the storage server, and sends a mount request to a storage device to mount the specified volume; and

the storage agent further configured to communicate a volume attribute request to the storage server, receive the metadata from the centralized metadata database of the storage server, write to the file data on the specified volume using the metadata, and send updated metadata to the storage server.” Emphasis added.

Applicants submit that Soltis, Sirota, and Byrnes do not disclose metadata comprising a file data characteristic, a device characteristic, a media characteristic, a positioning indicator, and an append position indicator and sending a volume access request for a specified volume to a storage server, receiving an available volume notification for the specified volume from the storage server, and sending a mount request to a storage device to mount the specified volume as claimed in claim 1. Independent claims 10, 15, 19, 25, and 29 include similar limitations.

Soltis does disclose inodes, pointer blocks, and allocation tables. Soltis, page 1, ¶¶ 12, lines 4-6. However, Soltis does not disclose metadata comprising a file data characteristic, a device characteristic, a media characteristic, a positioning indicator. Sirota and Byrnes also do not teach this limitation.

In addition, Soltis, Sirota, and Byrnes do not disclose sending a volume access request for a specified volume to a storage server, receiving an available volume notification for the specified volume from the storage server, and sending a mount request to a storage device to mount the specified volume. Because Soltis, Sirota, and

Byrnes do not teach each element of claims 1, 10, 15, 19, 25, and 29, Applicants submit that claims 1, 10, 15, 19, 25, and 29 are allowable. Applicants further submit that claims 2-5, 7-9, 12-14, 16-18, 20, 21, 23, 26, and 27 are allowable as depending from allowable claims. Claims 6, 11, 22, 24, and 28 are canceled.

CONCLUSION

Applicants respectfully request reconsideration of the claims in view of the amendments and remarks made herein. A notice of allowance is earnestly solicited. If the Examiner believes a telephone interview would expedite the prosecution of this application, the Examiner is invited to contact the attorney listed below.

Respectfully submitted,

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